Case Report: Nursing Experience with Herbal Cupping Therapy for Qi Stagnation and Blood Stasis Pattern Low Back Pain

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Abstract

This paper reports the clinical efficacy of herbal water cupping therapy for pain management in one case of lumbago with qi stagnation and blood stasis pattern. Based on the lumbar pain symptoms presented by the patient during hospitalization, application of the characteristic water cupping technique of TCM nursing achieved significant therapeutic effects, thereby improving the patient's quality of life.

Full Text

Nursing Experience of Traditional Chinese Medicine Water Cupping Therapy for Treating Qi Stagnation and Blood Stasis Type Lower Back Pain: A Case Report

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Abstract

This article summarizes the clinical efficacy of traditional Chinese medicine water cupping therapy in treating pain in a patient with qi stagnation and blood stasis type lower back pain. Based on the lumbar pain symptoms exhibited by the patient during hospitalization, the application of characteristic traditional Chinese medicine nursing water cupping technology demonstrated significant therapeutic effects in alleviating the patient's lumbar pain symptoms, thereby improving their quality of life.

Keywords: Water cupping; Medicine cupping; Lower back pain; Qi stagnation and blood stasis syndrome

Lower back pain (LBP) is one of the most common chronic pain conditions, with the majority of patients achieving relief and recovery through conservative treatment [1]. In recent years, the incidence of LBP has gradually increased with age, and recurrences are frequent, severely impacting patients' quality of life and emotional well-being, thereby attracting greater attention from affected individuals [2]. As a manifestation of bi syndrome in traditional Chinese medicine, LBP can be classified into wind-cold-dampness type, kidney deficiency type, and qi stagnation with blood stasis type, with the latter being particularly common in clinical practice [3]. Bamboo cupping is a traditional Chinese medicine therapy that utilizes bamboo vessels as natural, environmentally friendly, and cost-effective instruments, offering promising applications and significant value in healthcare [4]. Water cupping therapy integrates the advantages of cupping, medicinal herbs, and thermotherapy, enhancing the effects of cupping, heat therapy, and herbal medicine simultaneously. This treatment modality combines the physical therapy of cupping with the biochemical effects of drug penetration therapy [5-7].

During treatment, the bamboo cups absorb effective herbal components, which then penetrate locally into the body to regulate qi and blood, unblock meridians, reduce swelling and pain, and improve joint mobility. This approach has demonstrated excellent clinical outcomes in managing symptoms of chronic qi stagnation and blood stasis type lower back pain. This article reports the nursing experience of using traditional Chinese medicine water cupping therapy to treat pain in one patient with qi stagnation and blood stasis type lower back pain.

1. Case Information

The patient was a 63-year-old female admitted to our hospital on December 2, 2023, with a chief complaint of "sharp pain in the lower back and right lower limb for over two weeks." The outpatient diagnosis was "lumbar disc herniation with sciatica/lower back pain/qi stagnation and blood stasis syndrome." Admission symptoms included: sharp pain in the lumbar region with obvious stiffness, fixed pain location, and significant limitation of movement. Since onset, the patient reported no abnormal temperature sensations, normal appetite and sleep, regular bowel movements and urination, and denied any history of food or drug allergies.

Specialized examination revealed: straightened lumbar curvature; lumbar spine mobility: flexion 60°, extension 30°, left lateral bending 20°, right lateral bending 20°, left rotation 10°, right rotation 10°; tenderness at L4/L5 and L5/S1 interspinous spaces; tenderness beside L4, L5, and S1 spinous processes; tenderness at bilateral sciatic nerve piriformis outlet; right straight leg raising

test at 60° with positive reinforcement; positive supine abdominal thrust test; slightly diminished right patellar and Achilles tendon reflexes; no patellar or ankle clonus; bilateral extensor hallucis muscle strength grade 5; left dorsiflexion muscle strength grade 5; right dorsiflexion muscle strength grade 5; no obvious abnormalities in bilateral lower leg skin sensation; negative bilateral Babinski sign.

Auxiliary examination: Lumbar MRI showed lumbar degenerative osteoarthropathy with L4/L5 and L5/S1 disc bulging. Tongue appearance was pale purple with a thin white coating, and pulse was wiry.

Traditional Chinese Medicine Diagnosis: Lower back pain (qi stagnation and blood stasis syndrome)
Western Medicine Diagnosis: Lumbar disc herniation with sciatica

Upon admission, the patient received traditional Chinese massage and acupressure therapy, which promotes blood circulation, relieves muscle tension and spasms, and reduces pain and inflammation through traditional manual techniques including pointing, kneading, and rolling maneuvers [8]. Additional treatments included: ultrasound drug permeation therapy, which uses ultrasonic waves to deliver medication through the skin directly to the affected area, enhancing drug penetration and absorption for improved therapeutic effects; infrared local irradiation therapy to promote blood circulation and improve microcirculation, helping to reduce local muscle tension; microcomputer functional electrical stimulation therapy, which uses electrical currents to stimulate muscles and nerves, promoting muscle contraction and relaxation to improve neurological function; and wax therapy for pain relief, cold dispersion, and reduction of tissue edema.

Following the above treatments, the patient reported improvement in sharp pain symptoms in the lower back and right lower limb. On December 14, 2023, the patient experienced worsening lumbar pain, with lumbar muscle strain identified as the primary cause. The pain fluctuated with weather changes and fatigue levels, varying in intensity. Water cupping therapy was administered twice weekly, with other treatments continuing as before. By December 30, 2023, the patient reported complete symptom resolution and was discharged following comprehensive medical evaluation.

2. Nursing Care

2.1 Assessment Methods

Pain Assessment Using the Numerical Rating Scale (NRS): This pain assessment tool is suitable for patients who can communicate effectively. It employs a numerical system to measure pain intensity, typically using a 10-centimeter ruler marked with numbers from 0 to 10, where 0 represents no pain, 1-3 mild pain, 4-6 moderate pain, 7-8 severe pain, and 9-10 extreme pain. Patients mark the scale according to their pain experience, with the marked

point indicating pain intensity. Higher scores indicate more severe pain. The NRS is a simple, intuitive, and easily understood pain assessment tool widely used in clinical practice [9].

Barthel Index Assessment: The Barthel Index evaluates activities of daily living across 10 items including feeding, bathing, grooming, dressing, bowel control, bladder control, toilet use, bed-to-chair transfer, walking on level ground, and stair climbing [10]. Due to pain preventing prolonged sitting or standing, the patient's daily living abilities were compromised. Lower scores indicate greater dependence on daily activities and poorer functional capacity [11]. Designed by Dorother Barthel and Floorence Mahone in 1965, the Barthel Index is simple to administer with high reliability and is currently the most widely used daily living ability assessment scale worldwide [12].

2.2 Nursing Diagnoses

1. **Pain:** Related to impaired qi and blood circulation in the lumbar region, leading to prolonged blood stasis and blood deficiency that fails to nourish tendons and vessels.
2. **Knowledge Deficit:** Related to lack of awareness about LBP prevention and failure to adopt effective preventive measures; unclear understanding of rehabilitation exercises leading to inappropriate training methods; and insufficient attention to the condition resulting in delayed medical consultation.

2.3 Nursing Plan

For the patient with qi stagnation and blood stasis type lower back pain, water cupping therapy was administered twice weekly as per medical orders. The goals were to achieve an NRS pain score $ $3 and a Barthel daily living ability score $ $90 after treatment. For pain management and knowledge deficit, interventions included health education about the disease, dietary guidance, psychological support, and exercise rehabilitation to alleviate pain symptoms, improve quality of life, enhance disease awareness, and promote correct functional exercise methods.

2.4 Nursing Implementation

2.4.1 General Nursing Care Provide a quiet and comfortable environment to ensure adequate rest, avoiding prolonged sitting or standing. Maintain clean, dry bed linens to prevent the patient from catching cold. Install anti-slip facilities in the ward to ensure patient safety.

2.4.2 Traditional Chinese Medicine Characteristic Nursing: Water Cupping Therapy **Standard Procedure:** The boiling method is employed, where appropriate herbal slices are placed in a pot with water and boiled for 30 minutes. Appropriately sized bamboo cups are then boiled in the herbal

solution for 1-3 minutes. Using forceps, the cups are removed from the bottom, water is shaken off, the opening is turned downward, and a cold towel is tightly pressed against the cup opening to absorb water and reduce temperature before immediate application to the skin [13].

Acupoint Selection for Qi Stagnation and Blood Stasis Type Lower Back Pain: - **Mingmen (GV4):** A Governing Vessel point located between the second and third lumbar spinous processes. - **Shenshu (BL23):** Located below the second lumbar spinous process, 1.5 cun lateral to the midline. - **Yaoyangguan (GV3):** Located on the posterior midline, in the depression below the fourth lumbar spinous process. - **Yaoshu (GV2):** Located in the sacral region on the posterior midline, in the depression below the fourth lumbar spinous process. - **Xuanshu (GV5):** Located on the posterior midline, in the depression below the first lumbar spinous process. - **Ashi points:** Areas where the patient experiences sensations of soreness, numbness, distension, pain, or heaviness upon palpation.

Personalized Treatment Protocol: Based on the patient's symptoms, constitution, and etiology, a personalized water cupping therapy plan was developed: water cupping therapy twice weekly for one week per course, with each session lasting 10-15 minutes. For qi stagnation and blood stasis type lower back pain, the herbal formula selected included qi-supplementing, blood-nourishing, and blood-activating meridian-opening herbs such as Achyranthes bidentata, Liquidambaris Fructus, Cinnamomum cassia, Dipsacus asper, Piper kadsura, Paeonia lactiflora, and Angelica sinensis.

During treatment, appropriate positioning and acupoint selection are essential. Herbal decoction requires proper control of heat and duration to ensure complete extraction and full therapeutic effect. Throughout the procedure, patient responses are observed and inquiries are made about their sensations; if discomfort occurs, pressure is adjusted or cups are removed promptly. After cup removal, the skin condition at the treatment sites is examined, and any abnormalities are addressed immediately. Pain scores are assessed weekly.

2.4.3 Nursing Care for Knowledge Deficit Patients and families are educated about disease etiology and treatment plans to facilitate understanding of the condition's nature. Guidance is provided for daily life activities, including wearing high-waisted pants to prevent lumbar cold exposure, sitting on hard chairs, sleeping on firm beds with soft padding, maintaining proper work-life balance, and ensuring correct posture during activities. Medication usage and precautions are explained to avoid adverse reactions. Dietary recommendations emphasize qi-moving, blood-activating, and stasis-resolving foods such as black fungus, enoki mushrooms, and peach kernels, while avoiding spicy and irritating foods. Emotional care employs guidance, counseling, and distraction techniques to regulate organ functions through qi regulation, maintaining a comfortable and optimistic mood that facilitates recovery and health preservation [14].

Targeted functional exercises are provided to strengthen lumbar muscles and improve stability: in the second week, forward bending exercises were instructed (standing with feet shoulder-width apart, bending forward at the hip joint with hands on waist or hanging naturally, gradually approaching the floor for 1-2 minutes, repeated 3-5 times); in the third week, backward extension exercises (standing position, hands on hips or buttocks, extending the upper body backward for 1-2 minutes, repeated 3-5 times); in the fourth week, lateral bending exercises (standing with feet shoulder-width apart, hands on hips, bending laterally at the waist 6-8 times per side). All movements should be performed slowly to prevent lumbar injury.

2.5 Nursing Evaluation

Following the exacerbation of lumbar pain on December 14, pain gradually decreased after water cupping therapy .

Table 1 Comparison of NRS Pain Scores After Water Cupping Therapy

After combined water cupping therapy and targeted functional exercises, lower back pain symptoms improved .

Table 2 Comparison of Barthel Scores at Admission and Discharge After Water Cupping Therapy

One month post-discharge follow-up revealed occasional lower back pain symptoms. The patient was advised to rest appropriately and avoid overexertion, seeking timely medical attention if discomfort persisted.

3. Discussion

Lower back pain is a common symptom that can persist for more than 12 weeks, with recurrent episodes potentially worsening over time, primarily manifesting as lumbosacral pain [15-16]. Qi stagnation and blood stasis type represents a common pattern causing lower back pain, characterized by sharp lumbar pain, fixed pain location, lumbar stiffness, and limited mobility. This TCM pattern describes a pathological state where prolonged qi stagnation leads to impeded blood flow; normal blood circulation depends on qi propulsion, and when qi and blood flow is obstructed, blood stasis develops [17].

Treatment goals for qi stagnation and blood stasis type lower back pain include pain relief, functional restoration, and recurrence prevention. Water cupping therapy is a traditional Chinese medicine treatment based on meridian theory, integrated with herbal medicine principles and disease prevention concepts. Through cupping adsorption on the body surface combined with herbal penetration and stimulation, this therapy regulates qi and blood, relaxes tendons and activates collaterals, dispels wind and dampness, and warms meridians to dispel cold, thereby achieving therapeutic effects. Water cupping therapy is simple to operate, safe, and reliable, requiring no complex equipment or technology.

With the development and innovation of modern medicine, water cupping therapy continues to evolve and improve. In the future, this therapy will find broader applications across more fields, contributing significantly to human health.

References

[1] Zhang Renwen, Mo Zhuomao, Tang Shujie. Finite element study on manipulation techniques for lumbar disc herniation [J]. Chinese Journal of Traditional Medical Traumatology & Orthopedics, 2018, 26(01): 81-83+88.
[2] Wu Xuyi, Zhang Weilin, Du Chunping. Effect of post-discharge rehabilitation nursing on recurrent lumbocrural pain in patients with lumbar disc herniation [J]. Zhejiang Medical Journal, 2018, 40(13): 1503-1505.
[3] Wang Guibin, Jing Lin, Pan Li, et al. Experience in treating lower back pain with traditional Chinese medicine [J]. Acta Chinese Medicine, 2021, 36(10): 2059-2062.
[4] Huang Tianjiao, Zheng Ruwen. Historical origin and clinical application of bamboo medicinal cupping and moving cupping method [J]. China Journal of Traditional Chinese Medicine and Pharmacy, 2018, 33(07): 3159-316.
[5] Huang Tianjiao, Zheng Ruwen. Historical origin and clinical application of bamboo medicinal cupping and moving cupping method [J]. China Journal of Traditional Chinese Medicine and Pharmacy, 2018, 33(07): 3159-316.
[6] Xu Fuli, Gao Liyun, Gu Yanling, et al. Application of medicinal cupping combined with hot herbal compress in patients with qi stagnation and blood stasis type lumbocrural pain [J]. Journal of Qilu Nursing, 2021, 27(24): 85-87.
[7] Tian Yixian, Li Wenting, Zhao Haijie, et al. Study on comprehensive nursing intervention in patients with diabetic nephropathy [J]. Nursing of Integrated Traditional Chinese and Western Medicine, 2023, 9(9): 219-222.
[8] Gong Jing, Wei Zhe, Wei Yan, et al. Clinical rehabilitation nursing analysis of lower back pain [J]. China Continuing Medical Education, 2015, 7(22): 203-205.
[9] Hao Shuangling, Zhao Jun. Clinical pain measurement methods and their evaluation [J]. Foreign Medical Sciences (Anesthesiology & Resuscitation), 1993, (04): 228-230.
[10] Hou Dongzhe, Zhang Ying, Wu Jialing, et al. Reliability and validity of the Chinese version of the Barthel Index [J]. Clinical Focus, 2012, 27(03):
[11] Hou Dongzhe, Zhang Ying, Wu Jialing, et al. Reliability and validity of the Chinese version of the Barthel Index [J]. Clinical Focus, 2012, 27(03):
[12] Mahoney FI, Barthel DW. Functional evaluation: the Barthel Index [J]. Md State Med J, 1965, 14: 61-65.
[13] Huang Tianjiao, Zheng Ruwen. Historical origin and clinical application of bamboo medicinal cupping and moving cupping method [J]. China Journal of Traditional Chinese Medicine and Pharmacy, 2018, 33(07): 3159-31.
[14] Deng Min, Tu Jianhong, Guan Yuying. Application of TCM emotional nursing combined with hot herbal compress in nursing care of patients with qi stagnation and blood stasis type lower back pain [J]. Guangming Journal of Chinese Medicine, 2022, 37(22): 4167-4169.

[15] Zhang Yating. Clinical study on treating chronic nonspecific lower back pain with occasional needling combined with exercise needling [D]. Changchun University of Chinese Medicine, 2023. DOI: 10.26980/d.cnki.gcczc.2023.000264.
[16] Chinese Expert Consensus on Diagnosis and Treatment of Acute/Chronic Nonspecific Lower Back Pain [J]. Chinese Journal of Spine and Spinal Cord, 2016, 26(12): 1134-1138.
[17] Lin Huijuan, Pan Jiancong, Ji Ting. Clinical efficacy of blood-letting therapy at sha points on patients with qi stagnation and blood stasis type lower back pain [J]. Chinese and Foreign Medical Research, 2023, 21(31): 9-12. DOI: 10.14033/j.cnki.cfmr.2023.31.003.

Note: Figure translations are in progress. See original paper for figures.